

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A lithographic projection assembly, comprising:
  - at least one load lock constructed and arranged to transfer an object between a first environment and a second environment;
  - an object handler comprising a handler chamber in which said second environment prevails, said object handler and said at least one load lock being constructed and arranged to transfer said object between said handler chamber and said at least one load lock; and
  - a lithographic projection apparatus comprising a projection chamber;
  - wherein said handler chamber and said projection chamber can communicate for transferring of said object between said handler chamber and said projection chamber, and
  - wherein said load lock comprises a load lock chamber provided with 1) at least two mutually distinct object supports, each object support comprising a support plate being configured to individually support said object, and 2) a positioning device constructed and arranged to decrease the distance between one of said support plates and a ceiling plate of the load lock chamber prior to and/or during evacuation of said load lock chamber, and to increase said distance between said support plate and said ceiling plate prior to said object being removed from or delivered to said at least one of said object supports,
  - wherein said positioning device is configured and operable to decrease a gas volume adjacent a surface of said object positioned on at least one of said object supports.
2. (Original) An assembly according to claim 1, wherein said second environment has a lower pressure than said first environment.
3. (Original) An assembly according to claim 2, wherein said load lock further comprises evacuation devices constructed and arranged to evacuate said load lock chamber.
4. (Original) An assembly according to claim 2, wherein said load lock further comprises door devices constructed and arranged to close said load lock chamber during evacuation and to open said load lock chamber to permit said object to be positioned into said

load lock chamber and to respectively permit said object to be removed from said load lock chamber.

5.-6. (Cancelled).

7. (Previously Presented) An assembly according to claim 1, wherein said support plate is of a size about equal to or larger than said object to be supported, wherein the ceiling plate is provided above said at least one of said object supports, said ceiling plate having a size of about equal to or larger than said object.

8. (Currently Amended) An assembly according to claim 1, wherein said positioning device is ~~adapted~~ configured and operable to act on one of said support plate and said ceiling plate, while the other of said support plate and said ceiling plate is arranged in a stationary manner in said load lock chamber.

9. (Previously Presented) An assembly according to claim 1, wherein said positioning device is provided at a side of said load lock chamber, at the top of said load lock chamber, or at the bottom of said load lock chamber.

10. (Original) An assembly according to claim 1, wherein said load lock includes a thermal treatment device constructed and arranged to bring said object to a predetermined temperature or equalize said temperature across said object.

11. (Previously Presented) An assembly according to claim 10, wherein said support plate of at least one of said at least two object supports is provided with said thermal treatment device.

12. (Previously Presented) An assembly according to claim 10, wherein two of said at least two object supports are placed one above the other, and wherein said thermal treatment device is positioned between said two of said at least two object supports.

13. (Original) An assembly according to claim 10, wherein said thermal treatment device comprises lines and a fluid pumping system constructed and arranged to pump fluid through

said lines, said lines being arranged such that said lines are in thermal contact with said corresponding support plate.

14. (Original) An assembly according to claim 13, wherein said lines are provided internally in one of said support plate and a wall of said load lock chamber.

15. (Original) An assembly according to claim 1, wherein said load lock chamber comprises a top wall and a bottom wall, wherein a evacuation devices comprise an evacuation opening provided in the bottom wall of said load lock chamber, and wherein said load lock comprises a venting opening provided in said top wall of said load lock chamber.

16. (Original) An assembly according to claim 15, wherein said venting opening and said evacuation opening are arranged substantially centrally with respect to said object supports, said object supports being arranged one above the other.

17. (Original) An assembly according to claim 1, wherein said projection chamber is a vacuum chamber and wherein said lithographic projection apparatus comprises vacuum devices constructed and arranged to establish a vacuum in said vacuum chamber.

18. (Original) An assembly according to claim 1, wherein said projection apparatus comprises:

- a radiation system constructed and arranged to provide a beam of radiation;
- a support structure to support a patterning devices, said patterning devices serving to pattern said beam according to a desired pattern;
- a substrate table for holding a substrate; and
- a projection system constructed and arranged to project said patterned beam onto a target portion of said substrate.

19. (Original) An assembly according to claim 1, wherein said object is a semiconductor wafer.

20. (Previously Presented) An assembly according to claim 1, wherein a door device comprises a first door towards said first environment and a second door towards said second environment.

21. (Original) An assembly according to claim 1, further comprising two or more of said load locks.

22. (Currently Amended) A lithographic projection assembly, comprising  
at least one load lock constructed and arranged to transfer an object between a first environment and a second environment;

an object handler comprising a handler chamber in which said second environment prevails, said object handler and said load lock being constructed and arranged to transfer said object between said handler chamber and said load lock; and

a lithographic projection apparatus comprising a projection chamber;

wherein said handler chamber and said projection chamber can communicate for transferring of objects between said handler chamber and said projection chamber, and wherein said load lock comprises a load lock chamber which is provided with 1) at least two mutually distinct object supports, each object support comprising a support plate being configured to individually support said object, and 2) a positioning device constructed and arranged to decrease the distance between one of said support plates and a ceiling plate of the load lock chamber prior to and/or during evacuation of said load lock chamber, and to increase said distance between said support plate and said ceiling plate prior to said object being removed from or delivered to said at least one of said object supports and

wherein said object handler is integrated in said load lock, so that said handler chamber and said load lock chamber are a single unit and wherein said positioning device is configured and operable to decrease a gas volume adjacent a surface of said object positioned on at least one of said object supports.

Claims 23-29 (Cancelled)

Claim 30. (New) The assembly according to claim 1, wherein the assembly further comprises a fixed intermediate plate extending between a first object support and the ceiling plate, wherein the first object support is movable to and from the intermediate plate by the positioning device, to decrease, respectively increase, the distance between an object held by the first object support and the intermediate plate.

Claim 31. (New) The assembly according to claim 30, wherein a second object support extends between the intermediate plate and the ceiling plate, the second object support configured to hold an object between the intermediate plate and the ceiling plate.

Claim 32. (New) The assembly according to claim 31, wherein the second object support is fixed.

Claim 33. (New) The assembly according to claim 1, wherein the mutually distinct object supports include a first object support that is movable by the positioning device and a second object support that is not movable by the positioning device.

Claim 34. (New) The assembly according to claim 1, wherein the mutually distinct object supports include only two object supports.